



Jyothi Engineering College

NAAC Accredited College with NBA Accredited Programmes*

Approved by AICTE & affiliated to APJ Abdul Kalam Technological University

A CENTRE OF EXCELLENCE IN SCIENCE & TECHNOLOGY BY THE CATHOLIC ARCHDIOCESE OF TRICHUR

JYOTHI HILLS, VETTIKATTIRI P.O, CHERUTHURUTHY, THRISSUR, PIN-679531 PH : +91- 4884-259000, 274423 FAX : 04884-274777



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Best Practice-1

7.2.1. Social and Technical activities through Centre for Water Research and Education

Index

Sl. No.	Particulars	Document Proof
1.	Awareness Program	Relevant Documents
2.	Handbook	Front Cover
3.	On the Spot water quality testing at Client Site on their request	Request Letter from Client Post Analysis Results
4.	Website	https://cwre.jecc.ac.in/
5.	MoU	Agreement with Friends of Bharathapuzha
6.	Evidence of Success	
	6.1. Water Quality Analysis	Relevant Documents
	6.1.2 Project	Relevant Documents
	6.1.3 Feedback	https://cwre.jecc.ac.in/feedbacks.php

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Sunny
Dr. SUNNY JOSEPH KALAYATHANKAL
M.Tech, MCA, M.Sc, M.Phil, B.Ed
Ph.D (Computer Science), Ph.D (Maths)
PRINCIPAL
Jyothi Engineering College
Cheruthuruthy P.O.- 679 531



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One Day Awareness Training on Water Conservation- Part of Unnath Bharath Abhiyan activities

One day awareness on water conservation was conducted on 1.6.2019

The training was mainly aimed for officials of health department ie female workers since they are more concerned with these types of issues and we expect merit ,due to their constant interaction with the rural women groups. So we have initiated steps for ensuring participation of more members from Asha workers, and Kudumbasree people etc . The staff from the Jyothi engineering college were also invited and many of them accepted it with a positive attitude. The programme was well attended by 43 persons from both the panchayaths which includes 3 nos of health inspectors 33 Asha workers and 7 nos of kudumbasree people. From Jyothi engineering college 11 staff took part and thereby the total tally comes to 54. The expenses for this programme was met form the seed money of Unnat Bharath Abhiyan



Fig 1 Symbol of Unnath Bharath Abhiyan

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Fig 2 Programme being inaugurated by Mrs Padmaja President Vallathol Nager Grama panchayth



Fig 3 Participants of training to health officials

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[Signature]

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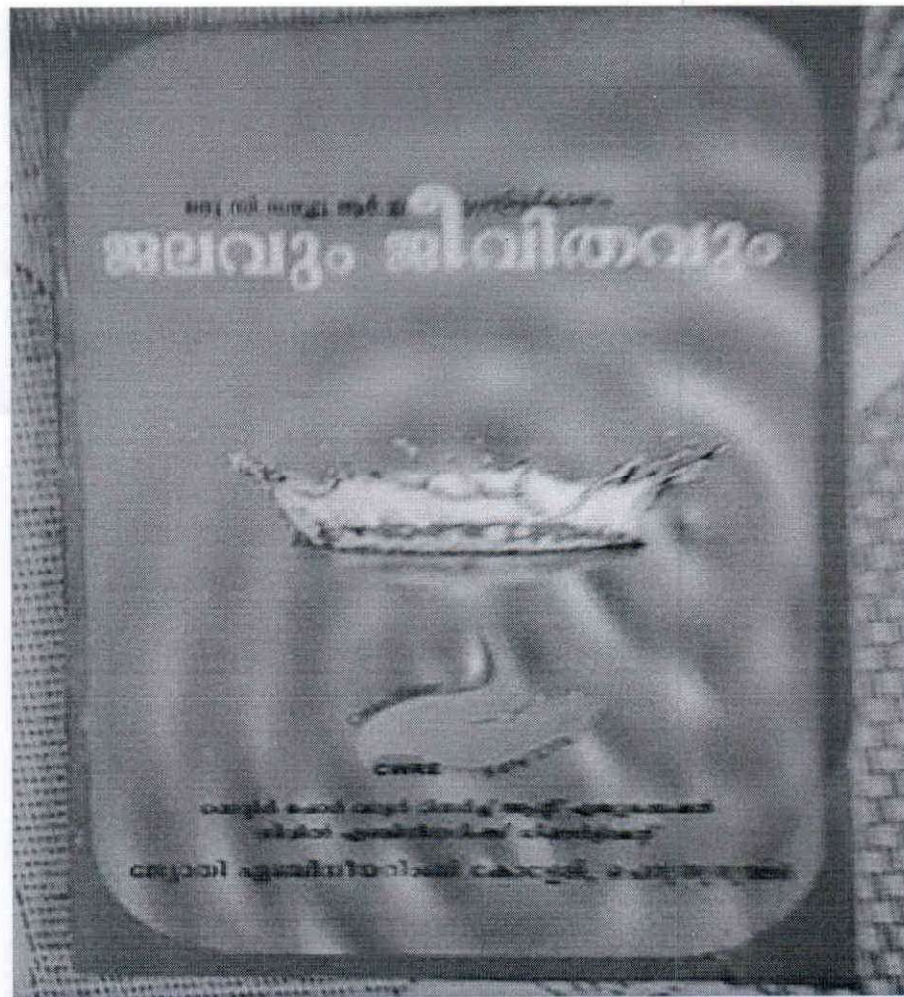
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Cover Page of Handbook



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Victor Manjila
Manjila (H)
Bairoor (P.O)
Thrissur - 14.

To,
The Principal
Jyothi Engineering College,
Cheruthuruthy.

Sir, ഞാൻ, വിദ്യാലയത്തിൽ ചില മാറ്റങ്ങൾ വരുത്താനായി
കോഴ്സുകളുടെ കാര്യം CWRE-യിൽ നിന്നും സെമിനാർ
കിന്റാണെന്ന് ശ്രദ്ധിക്കുന്നതിനായി വേണ്ടുന്ന നിർദ്ദേശങ്ങൾ
നൽകണമെന്ന് അഭ്യർത്ഥിക്കുന്നു.

മാർച്ച് 28/12/2020
മാർച്ച് 28/12/2020
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DEPARTMENT OF CIVIL ENGINEERING

CENTRE FOR WATER RESEARCH & EDUCATION

Approved by Kerala State Pollution Control Board as a commercial laboratory
vide order no : PCB/Lab approval 85/2019/valid upto 29.10.2021

Water Quality Test Data

Name of Customer : *Victor Manjila, Manjila (H), Kaimoor.*

Type of Source :

Date of Collection : *29.12.20.*

Date of Testing : *29.12.20 - 30.12.20.*

Standard Followed : IS 10500 - 2012

S/no	Parameter	Unit	Acceptable limit	Permissible limit	Content in the sample
1	Turbidity	NTU	1	5	
2	pH	No unit	6.5-8.5	No relaxation	
3	TDS	Mg/Litre	500	2000	
4	Alkalinity	Mg/Litre	200	600	
5	Total Hardness	Mg/Litre	200	600	
6	Chloride	Mg/Litre	250	1000	
7	Fluoride	Mg/Litre	1	1.5	
8	Nitrate	Mg/Litre	45	No relaxation	
9	Iron	Mg/Litre	0.3	No relaxation	
10	Manganese	Mg/Litre	0.1	0.3	
11	Sulphate	Mg/Litre	200	400	
12	Sulphide	Mg/Litre	0.05	No relaxation	
13	Dissolved Oxygen	Mg/Litre	-		
14	COD	Mg/Litre	-		<i>-28-</i>
15	BOD	Mg/Litre	-		
16	Coliform/100 ml	Number	Nil	Nil	
17	E_coli/100 ml	Number	Nil	Nil	

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Remarks and Recommendations

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Training Under CWRE- Student Projects

Year	Topic
2020	Study of water quality variation in Peechi dam
2019	Design of Kudumbasree Training Center on Water Reclaimed Land
2019	Dissemination Of Water Quality Issues and its Remedies through a Social Media
2019	Water Quality Variation With respect to Water Table in Vallathol NagarGrama Panchayath
2018	Feasibility Study for Rainwater Harvesting in Thazhapra in Vallathol Grama Panchayath .
2018	Design of a Waste Water Management System for Jyothi Engineering College
2017	Water audit and optimum solution for deficit management in Jyothi Engineering College
2017	Augmentation of water treatment plant for Vallathol Grama Panchayath

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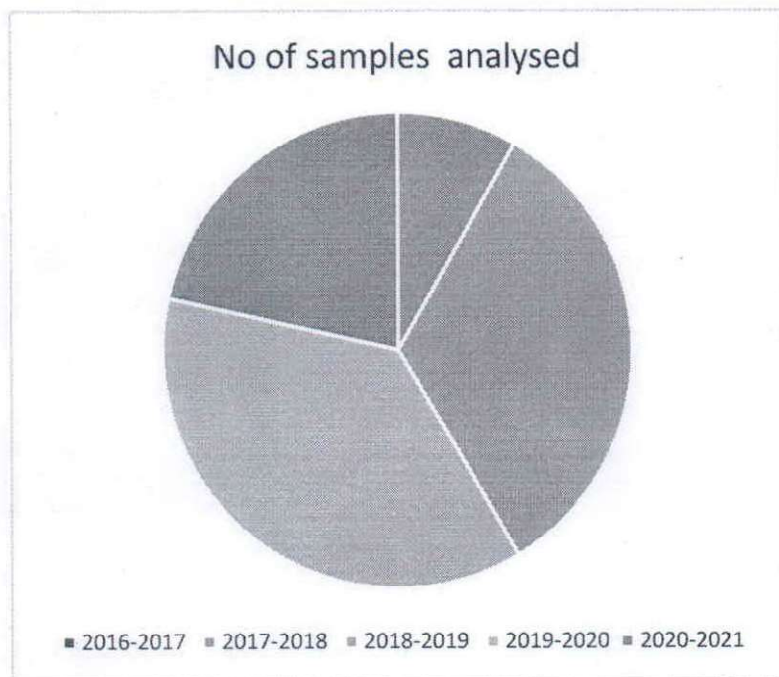
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Water Quality Analysis

Private water quality Analysis

Private water quality analysis is taken up based on a demand driven approach. The people approach the laboratory for various purposes' like remediation of water quality issues, obtaining license from government organizations etc .

The number of private analysis in each financial year are furnished below



Sl no	Year	No of samples analyse
1	2016-2017	10
2	2017-2018	17
3	2018-2019	68
4	2019-2020	76
5	2020-2021	44
	Total	215

Analysis of water samples under the save Thrissur program

The programme was initiated by the diocese of Thrissur to help the people on account of water pollution caused by the flood of 2018 . the programme includes analysis of water samples from various places in the district

Under this programme we analysed 964 water samples and details of which are furnished as below

Analysis data under the save Thrissur program

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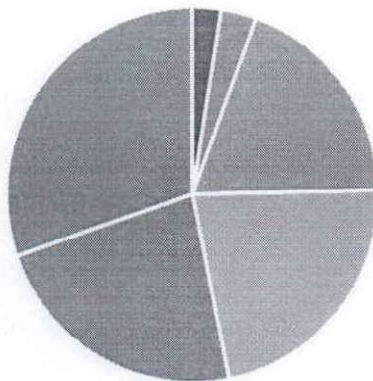
Sl no	Place	No of samples
1	Veluthur	67
2	Chittissery	83
3	Nedupuzha	457
4	Manalaur	355
	Total	964

The work was carried out free of cost as per instruction from the management

Analysis of water samples of the college

The laboratory also undertake analysis of water samples pertaining to the college water supply scheme . It includes testing of water samples of sources, open well and bore well. based on the testing results are recorded and issued for interpretation. The effectiveness of the chlorinating unit is also assessed by CWRE officials periodically

Analysis details of college water supply scheme



- 2015-2017 ■ 2016-2017 ■ 2017-2018
- 2018-2019 ■ 2019-2020 ■ 2020-2021

Sl no	Period	No of samp
1	June 2015-march 2016	4
2	2016-2017	5
3	2017-2018	31
4	2018-2019	36
5	2019-2020	37
6	2020-2021	49
	Total	162

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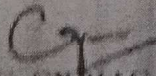
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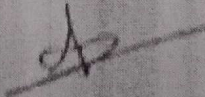


CERTIFICATE

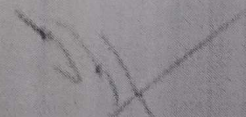
This is to certify that the report entitled **DISSEMINATION OF WATER QUALITY ISSUES AND ITS REMEDIES THROUGH A SOCIAL MEDIA** submitted by **GOKUL G (JEC15CE024)**, **JIM JOYEL JACKSON (JEC15CE035)**, **MEGHA T S (JEC15CE042)**, **NIDA NAINA E K (JEC15CE045)**, to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree in Bachelor of Technology in **Civil Engineering** is a bonafide record of the project work carried out by them under my/our guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.


Prof. M.G. CYRIAC

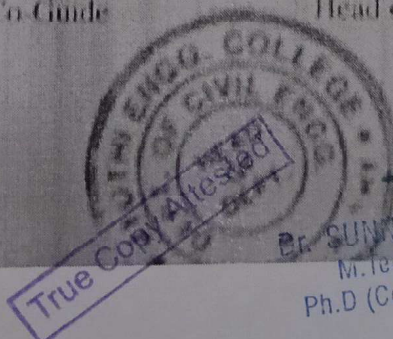
Project Guide

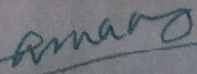

Ms. SEENIA FRANCIS

Co-Guide


Prof. S. RATHISH

Head of the Department




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കേരളം केरल KERALA

CV 521087

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding (MoU) is entered into on 17th October 2020 between the

Department of Civil Engineering



Jyothi Engineering College

True Copy Attested

Sunny

&

Friends of Bharathapuzha

Dr. SUNNY JOSEPH KALAYATHANKAL
M.Tech, MCA, M.Sc, M.Phil, B.Ed
Ph.D (Computer Science), Ph.D (Maths)
Principal
Jyothi Engineering College
Cheruthuruthy P.O. - 679 531

1) **Parties:** This Memorandum of Understanding (MoU) is made and entered into by and between the Friends of Bharathapuzha (FoB) and Jyothi Engineering College, Cheruthuruthy (Jyothi Engineering College).

[Signature]

Ms. Vincy Verghese
HOD-in-charge, CE Dept
Jyothi Engineering College

[Signature]

Dr. Sunny Joseph
Principal -in-charge
Jyothi Engineering College

[Signature]

Mr. Vinod M. Nambiar
Secretary
Friends of Bharathapuzha

ms 9899/4.11.2020

C.K. KOCHUMARY





കേരളം കേരल KERALA

CV 521088

- Purpose:** The purpose of this Memorandum of Understanding ('MoU') is formally to record the mutual interest of the Friends of Bharathapuzha (FoB) and Jyothi Engineering college, Cheruthruthy (JECC) to collaborate and set up a task force for the rejuvenation and conservation of Bharathapuzha.
- Term of MoU:** This MOU is effective upon the day and date last signed and executed by the duly authorized representatives of the parties to this MOU. The parties hereby agree to work jointly on the following activities for 2 years w.e.f 17th October 2020. This MOU can be extended, modified or terminated at any time as per mutual agreement.

Ms. Vincy Verghese
HOD-in-charge. CE Dept
Jyothi Engineering College

Dr. Sunny Joseph
Principal -in-charge
Jyothi Engineering College

Mr. Vinod M Nambiar
Secretary
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C.K. KOCHUMARY

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MVA Jan 7.

JYOTHI ENGINEERING.
CHERUTHRUTHY

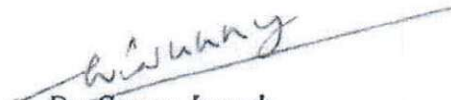
SUN VERGHESE
04 NOV 2020

4) Responsibilities and Action Plan:

- a. A joint action committee of FOB and JECC is to be formed and all activities should be based on a joint decision.
- b. FOB and JECC will jointly chart out feasible time bound programs for attaining the goal in a systematic way.
- c. Programs for student and faculty involvement in the rejuvenation activities of Bharathapuzha will be charted out by the Management of JECC.
- d. JECC will provide its technical expertise for resolving the issues through students' projects and similar programs.
- e. Department of Civil Engineering, JECC will take the lead role in joint activities with FOB; and HOD of Civil Engineering, will be communication officer from JECC side and Secretary of FoB, will be the communication officer, from the FOB side.
- f. The facilities at the Govt. approved water testing laboratory under the Department of Civil Engineering, JECC, will involve in analysis of water sample of Bharathapuzha at a price as per the discretion of JECC management.
- g. FOB will be responsible for the collection of field data, interaction with the Municipalities, Panchayaths and the conduct of awareness creating programs & IEC (Information, Education and Communication) activities.
- h. The survey analysis and report will be shared to the Shornur Municipality and Cheruthuruthy Panchayath for the follow-up actions as per mutual agreement between JECC and FOB.
- i. The timing and remuneration for the above programs and tests will be based on mutual agreement, acceptance and confirmation.



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HOD-in-charge, CE Dept
Jyothi Engineering College



Dr. Sunny Joseph
Principal -in-charge
Jyothi Engineering College



Mr. Vinod M. Nambiar
Secretary
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